

CLAIMS

1. A method comprising:

obtaining reference data that characterizes a media
stream,

obtaining altered data that characterizes said media
stream after said media stream has traversed a channel
that includes a network; and

determining a quality of service of said channel on the
basis of a comparison of said reference data and said
altered data.

2. The method of claim 1, wherein

said reference data characterizes a feature of said
media stream; and

said altered data characterizes a feature of said media
stream after said media stream has traversed said
channel.

3. The method of claim 1, wherein obtaining at least one of said
reference and said altered data comprises applying a Sarnoff
JND algorithm or an ANSI T1.801.03 algorithm.

4. The method of claim 2, wherein determining a quality of
service of said channel comprises comparing said first

reference data and said altered data.

5. The method of claim 1, further comprising:

obtaining network statistics associated with
transmission on said channel; and
correlating said network statistics with said altered
data.

6. The method of claim 5, further comprising selecting said
network statistics from the group consisting of jitter, packet
loss, and packet latency.

7. The method of claim 1, further comprising selecting said
channel to include:

an encoder for creating an encoded representation of
said media stream;

a decoder for recovering said media stream from said
encoded representation; and

a computer network between said encoder and said
decoder.

8. The method of claim 1, wherein obtaining said reference data
comprises:

passing said media stream through an encoder to generate
an encoded signal;

passing said encoded signal through a decoder to
generate a decoded media stream; and

passing said decoded media stream through a feature
extractor to extract said reference data.

9. A system comprising:

a first feature extractor for generating reference data
characterizing a media stream;

a second feature extractor for generating altered data
characterizing said media stream after said media
stream has traversed a channel that includes a network;
and

an analyzer for comparing said reference data and said
altered data to generate a transmission metric
indicative of a quality of service.

10. The system of claim 9, further comprising a correlator in
communication with said analyzer, said correlator being
configured to correlate network statistics associated with
said channel with said transmission metric.

11. The system of claim 10, further comprising a network monitor in communication with said correlator, said network monitor being configured to collect said network statistics.
12. The system of claim 10, wherein said correlator is configured to correlate statistics selected from the group consisting of: jitter, packet loss, and packet latency.
13. The system of claim 9, wherein said first and second feature extractors are configured to extract media features using an algorithm selected from the group consisting of: the Sarnoff JND algorithm and the ANSI T1.801.03 algorithm
14. A computer-readable medium having software encoded thereon, said software comprising instructions for:
- obtaining reference data that characterizes a media stream,
 - obtaining altered data that characterizes said media stream after said media stream has traversed a channel that includes a network; and
 - determining a quality of service of said channel on the basis of a comparison of said reference data and said altered data.
15. The computer-readable medium of claim 14, wherein

said instructions for obtaining reference data include
instructions for generating reference data
characterizing a feature of said media stream; and
said instructions for obtaining altered data comprise
instructions for generating altered data that
characterizes a feature of said media stream after said
media stream has traversed said channel.

16. The computer-readable medium of claim **14**, wherein said
instructions for obtaining at least one of said reference and
said altered data comprise instructions for applying a Sarnoff
JND algorithm or an ANSI T1.801.03 algorithm.
17. The computer-readable medium of claim **15**, wherein said
instructions for determining a quality of service of said
channel comprise instructions for comparing said first
reference data and said altered data.
18. The computer-readable medium of claim **14**, wherein said
software further comprises instructions for:
- obtaining network statistics associated with
transmission on said channel; and
correlating said network statistics with said altered
data.
19. The computer-readable medium of claim **18**, wherein said

20. The computer-readable medium of claim 14, wherein said software further comprises instructions for selecting said channel to include:

a computer network between said encoder and said decoder.

passing said decoded media stream through a feature extractor to extract said reference data.